<center>**REMARKS**</center>

This Amendment is fully responsive to the final Office Action dated September 21, 2009, issued in connection with the above-identified application. A request for continued examination (RCE) is included with this Amendment. Claims 14-19 are pending in the present application. With this Amendment, claims 14-19 have been amended. No new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

In the Office Action, claims 14-20 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Okada et al. (U.S. Publication No. 2002/0018643, hereafter "Okada"). The Applicants have amended claims 14, 16, 18 and 19 to more clearly distinguish the present invention from the cited prior art. For example, independent claim 14 (as amended) recites the following features:

"[a] picture coding apparatus which generates a random access unit as a part of a stream, the random access unit including picture access units each having (i) a coded picture data access unit storing coded picture data, and (ii) a picture parameter set access unit storing a picture parameter set used for decoding the coded picture data, said apparatus comprising:

a coding unit operable to generate the coded picture data by coding a picture;

an information generation unit operable to generate the picture parameter set used for decoding the coded picture data;

a first storage unit operable to store the coded picture data in the coded picture data access unit;

a second storage unit operable to store a predetermined number of picture parameter sets including the picture parameter set in a picture parameter set access unit included in a picture access unit located at a head of the picture access units included in the random access unit; and

a third storage unit operable to store a picture parameter set which is different from the predetermined number of picture parameter sets stored by said second storage unit, the picture parameter set being stored in a picture parameter set access unit included in a picture access unit that stores coded picture data which refers to the different picture parameter set,

wherein the picture parameter set includes at least one of a type of variable length coding method, an initial value of a quantization step, and a number of reference pictures, and

an I-picture is stored in the coded picture data access unit included in the picture access unit located at the head."

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The features noted above in independent claim 14 are similarly recited in independent claims 16, 18 and 19. That is, independent claims 16 and 18 are methods that include steps directed to the features of the apparatus of independent claim 14; and claim 19 is a recording medium having similar features of the apparatus of independent claim 14. Additionally, the features noted above in independent claim 14 (and similarly recited in independent claims 16, 18 and 19) are fully supported by the Applicants' disclosure.

The present invention (as recited in independent claims 14, 16, 18 and 19) is distinguishable from the cited prior art in that the present invention is characterized by (i) storing a predetermined number of picture parameter sets in a picture parameter set access unit which is included in a picture access unit located at the head position, and (ii) storing a picture parameter set, which is different from the predetermined number of picture parameter sets, in a picture parameter set access unit included in a picture access unit that stores coded picture data which refers to the different picture parameter set.

Conventionally, a picture parameter set which is redundantly referred to by plural pictures is added to a single picture out of plural pictures. However, if the single picture (i.e., with the picture parameter set added) fails to be reproduced during trick play, the picture parameter set cannot be obtained thereby causing a reproduction failure.

In the present invention (as recited in independent claims 14, 16, 18 and 19), the plural picture parameter sets are stored in picture parameter access units that are included in a random access unit. That is, the present invention stores a picture parameter set in a picture parameter access unit (i.e., in the picture access units) which is (i) included in the random access unit, and (ii) located at the head position; and stores the picture coded data of an I-picture therein. Since the I-picture must be reproduced during trick play, a necessary picture parameter set is consistently obtained and successful trick play is assured.

Moreover, traditionally storing all the picture parameter sets in picture access units (which store the coded picture data of the I-picture) can cause significant overloading during the decoding, which results in decoding delay.

The present invention (as recited in independent claims 14, 16, 18 and 19) resolves this problem by (i) storing the predetermined number of picture parameter sets in the picture access unit which stores the picture coded data of the I-picture, and (ii) storing the picture parameter set,

which is different from the predetermined number of picture parameter sets, in the picture access unit that stores the picture coded data and refers to the different picture parameter set.

The above characteristics of the present invention (as recited in independent claims 14, 16, 18 and 19) reduce overloading during decoding an I-picture, and make it possible to perform consistent and successful trick play operations.

In the Office Action, the Examiner relies on Okada for disclosing or suggesting all the features recited in independent claims 14, 16, 18 and 19. However, the Applicants assert that Okada fails to disclose or suggest at least the features of independent claims 14, 16, 18 and 19 (as amended).

Okada discloses an information recording medium that stores information (i.e., transmitted as a transport stream) as objects. Management information written to the information recording medium includes object information for managing the objects. The object information includes access maps (e.g., a PCR map and a PTS map starting at ¶ [214]).

As described in Okada, the access maps manage an MPEG transport stream in block units, wherein each block contains an integer multiple number of ECC blocks. In addition to the specific information for accessing the ECC blocks, the access maps also include an "I-picture Included Flag" indicating whether each block includes I-picture data. Therefore, in Okada, it is possible to randomly access the transport stream, which otherwise lacks random accessibility at the middle of the stream.

Okada is clearly different from the present invention (as recited in independent claims 14, 16, 18 and 19) for at least the reasons noted below.

First, neither the PCR map nor the PTS map (i.e., access maps) disclosed in Okada includes a type of a variable length coding method, an initial value of a quantization step, and the number of reference pictures, as in the present invention (as recited in independent claims 14, 16, 18 and 19).

Second, the PCR map and the PTS map (i.e., disclosed in Okada) are not stored in the picture access unit included in a stream. Instead, the access maps (i.e., PCR map and PTS map) are generated as management information, aside from the stream. Thus, Okada fails to even appreciate a problem (in the prior art) addressed by the present invention, which is that plural picture parameter sets need to be stored in particular picture access units of the stream.

Third, as noted above, the PCR map and the PTS map disclosed in Okada are generated as the management information, aside from the stream. Thus, Okada fails to disclose or suggest storing a predetermined number of the picture parameter sets in a picture access unit which is located at the head position of the random access unit and includes the picture coded data of the I-picture, as recited in independent claims 14, 16, 18 and 19.

Finally, for similar reasons noted above, Okada also fails to disclose or suggest storing a picture parameter set, which is different from the predetermined number of picture parameter sets, in a picture parameter set access unit that stores coded picture data which refers to the different picture parameter set (as recited in independent claims 14, 16, 18 and 19).

Based on the above discussion, the PCR map and the PTS map disclosed in Okada are completely different from the picture parameter set of the present invention (as recited in independent claims 14, 16, 18 and 19), and therefore solve a completely different problem (in the prior art) than the present invention (as recited in independent claims 14, 16, 18 and 19).

For at least the reasons noted above, independent claims 14, 16, 18 and 19 (as amended) are not anticipated or rendered obvious by Okada. Likewise, claims 15 and 17 are not anticipated or rendered obvious by Okada at least by virtue of their dependencies from independent claims 14 and 16.

In light of the above, the Applicants submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue. The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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